

The jig shown in Fig. 2 fulfills all these conditions and gives very good results. It consists of a cast-iron angle-plate base JS, which is fastened upon the drilling machine table. A bracket C is fastened to this base by countersunk illister-head screws. This bracket, which is of U-shape, is provided with a stud *L* fitting into the finished bore of wheel *A*. The two arms of the U-shaped bracket serve as supports for the drill guides *M*. At one side the pin *P* passes through bracket f, while the opposite side of *C* is provided with an indentation to receive the pin *N* which connects the drill guides *M*. Pin *N* is held in

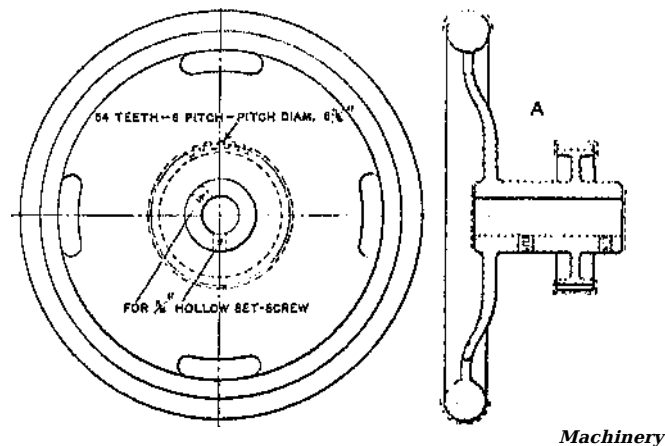


Fig. 1. Combination Flywheel and Driving Pinion

place by headless set-screws *S* which also hold the drill guides to pin *P* as shown. One end of pin *N* forms a handle by means of which the guides may be conveniently swung out about pin *P* as a fulcrum. Bracket *C* fits tightly between drill guides *M* at both ends, thus holding them firmly in place. A screw *O* having its center located somewhat above the center of pin *N* prevents this pin and also the drill guides from coming up with the drill, and breaking the latter. Bracket *C* is provided with a slot in which slides a rack *D*, a detail view of which is shown at *F*, which is provided with teeth of the same pitch as those in pinion *A* that are cut before the wheel comes to the drilling